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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/704,968	11/02/2000	Tetsuo Shibamura	097929-4689	4432

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EXAMINER

HUANG, EVELYN MEI

ART UNIT

PAPER NUMBER

1625

DATE MAILED: 11/14/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/704,968	<b>Applicant(s)</b> SHIANUMA ET AL.	
	<b>Examiner</b> Evelyn Huang	<b>Art Unit</b> 1625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 11,13,14 and 16-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11,13,14 and 16-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11/20/02 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All   b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____.  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____. | 6) <input type="checkbox"/> Other: _____                                    |

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9-17-2002 has been entered.
2. Claims 11, 13, 14, 16-19 are pending.

***Claim Rejections - 35 USC § 112(1)***

3. The 112 first paragraph rejection for 1 is rendered moot by the cancellation of the claim. The corresponding new claim 11 has defined R1 and R2 and is therefore not subjected to this rejection.

***Claim Rejections - 35 USC § 112(2)***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 11, 13, 14, 16-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a. Claim 11, should 'methycyclopentyl group, a dimethycyclopentyl group, a trimethycyclopentyl group, a tetramethycyclopentyl group', 'n,n-dimethycyclohexyl group, n, n,n-trimethycyclohexyl group', '4-isopropylbrezyl group' be 'methy/cyclopentyl group, a dimethy/cyclopentyl group, a trimethy/cyclopentyl group, a tetramethy/cyclopentyl group', 'n,n-dimethy/cyclohexyl group, n, n,n-trimethy/cyclohexyl group', '4-isopropylbenzyl group'?

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b. Claim 13, it is unclear whether these are compound claims, composition claims or method of use claims. Applicant maintains that these are compound claims. Amending the claim to the compound claim format is recommended. As presented in the instant, it is unclear which compound is being claimed. Assuming that the compound claimed is the compound of the formula wherein Ar<sup>1</sup> and Ar<sup>2</sup> represent an aryl, the following 102(b) rejections over Sugihara and Dietrich-Buchecker are made (see paragraphs 6, 7 below).

c. Claims 16, 18, what is the process for? Applicant argues that it is not a product claim and so the product need not be recited. On the contrary, just listing some steps without reciting the end product is indefinite in scope.

The rejection is applicable to claims dependent on the above claims.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 13, 16-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Sugihara (cited in PTO-892 mailed on 7-25-2001). The process (page 594) of making compound 6, 8, 10, 12 (page 593) is encompassed by the instant process claims 16-17. The compound of RN 51786-73-3 (compound 14 on page 593) and the process of preparation thereof, are encompassed by the instant claims 13, 18, 19.

7. Claim 13 is rejected under 35 U.S.C. 102(b) as being anticipated by Dietrich-Buchecker (cited in PTO-892 mailed on 7-25-2001). Compounds of RN 107428-38-6 and 107428-37-5 are encompassed by the instant claim.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Juda (3951833, cited in PTO-892 mailed on 7-25-2001).

Juda generically discloses a 1, 10-phenanthroline compound useful for inhibiting the growth of microorganisms. (column 3). A specific example, 2, 9-dimethyl-4, 7-diphenyl-1, 10-phenanthroline is described (column 8, Table V, Example 27).

Juda's Example 27 has a methyl instead of the instant ethyl, or propyl on the 1,10 phenanthroline.

Juda, however, teaches that methyl, ethyl, and propyl are optional choices within the lower alkyl of 1-4 carbon atoms (column 3, lines 39-40).

At the time of the invention, in view of Juda's teaching that all the species within the generic disclosure would be useful for inhibiting the growth of microorganisms, one of ordinary skill in the art would be motivated to prepare the alternative species within the small genus disclosed by Juda to arrive at the instant invention with the reasonable expectation of obtaining an additional biocidal compound.

Applicant argues that Juda fails to suggest the use of the inventive compound for use in electronics and between electrical components. The court, however, has held that "it is not necessary in order to establish a prima facie case of obviousness....that there be a suggestion or expectation from the prior art that the claimed [invention] will have the same or similar utility as one newly discovered by the applicant" and concluded that a prima facie case was established because 'the art provided the motivation to make the claimed composition in the expectation that they would have similar properties'. In re Dillon, 919 F2d. 688, 16 USPQ 2d. 1897.

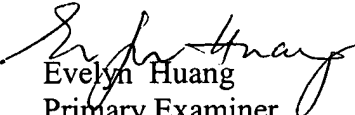
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Applicant maintains that the Office bears the burden of showing by scientific fact that the substituents are within the skill of the artisan. On the contrary, a reference is presumed operable until applicant provides *facts* rebutting the presumption of operability. In re Sasse, 629 F.2d 675, 207 USPQ 107 (CCPA 1980). See MPEP § 2121.01, and 716.07. The burden therefore is on the applicant to show by scientific facts that the substituents as disclosed by Juda are not within the skill of the artisan.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Evelyn Huang whose telephone number is 703-305-7247. The examiner can normally be reached on Tuesday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alan Rotman can be reached on 703-308-4698. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-4556 for regular communications and 703-308-4556 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1235.

  
Evelyn Huang  
Primary Examiner  
Art Unit 1625

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November 7, 2002